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| <b>Transmittal Letter To The United States<br/>Designated/Elected Office (DO/EO/US) Concerning A<br/>Filing Under 35 U.S.C. 371</b>   |   | Attorney Docket No.: 27465U<br>U.S. Application No.: <b>10/588216</b><br>Not Yet Assigned |
| International Application:<br><b>PCT/FI2005/000074</b>  | International Filing Date:<br><b>FEBRUARY 4, 2005</b> | Priority Date Claimed:<br><b>FEBRUARY 6, 2004</b>   |
| Title of Invention: <b>TITANIUM OXIDE PRODUCT METHOD FOR MAKING THE SAME AND ITS USE<br/>AS A PHOTOCATALYST</b>   |   |   |
| Applicants for DO/EO/US: KARVINEN, Salla; LAMMINMAKI, Ralf-Johan  |   |   |
| Applicant hereby submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:   |   |   |
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 USC 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)):           <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau).</li> <li>b. <input type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input checked="" type="checkbox"/> A English translation of the International Application as filed (35 U.S.C. 371(c)(2)).</li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not transmitted by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol> |   |   |
| <b>ITEMS 11 to 20 BELOW CONCERN OTHER DOCUMENT(S) OR INFORMATION INCLUDED:</b>  |   |   |
| <ol style="list-style-type: none"> <li>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>12. <input checked="" type="checkbox"/> An assignment document in favor of <b>KEMIRA PIGMENTS OY</b> of <b>Helsinki, FINLAND</b> for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input checked="" type="checkbox"/> A <b>FIRST</b> preliminary amendment.</li> <li>14. <input type="checkbox"/> A <b>SECOND</b> or <b>SUBSEQUENT</b> preliminary amendment</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A change of power of attorney and/or address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter2 and 35 USC 1821 - 1825</li> <li>18. <input type="checkbox"/> A second copy of the published international application under 35 USC 154(d)(4)</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 USC 154(d)(4)</li> </ol>  |   |   |

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| U.S. Application No. <b>08216</b><br>Not Yet Assigned  | International Application:<br><b>PCT/FI2005/000074</b> | Attorney Docket No.: 27465U     |                     |
| 20. <input checked="" type="checkbox"/> Other items or information:<br>TRANSMITTAL LETTER; INTERNATIONAL PUBLICATION NUMBER: WO 2005/075354 A2; INTERNATIONAL PUBLICATION DATE: AUGUST 18, 2005; WHICH CONSISTS OF 23 PAGES: 1 PAGE FOR THE COVER SHEET, WITH THE ABSTRACT, 17 PAGES OF TEXTUAL SPECIFICATION, 3 PAGES OF 22 CLAIMS, AND 2 SHEETS OF DRAWINGS; <b>PRELIMINARY AMENDMENT, WHICH CONSISTS OF: ATTACHMENT A, TO BE EXAMINED</b> ; EXECUTED DECLARATION AND POWER OF ATTORNEY; EXECUTED ASSIGNMENT, WITH RECORDATION COVER SHEET; PCT/IPEA/416 (NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY); PCT/IPEA/409 (INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY); PCT/ISA/237 (WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY); PCT/ISA/210 (INTERNATIONAL SEARCH REPORT); SEARCH REPORT FROM CORRESPONDING FINNISH APPLICATION NO.: 20040186; INFORMATION DISCLOSURE STATEMENT; PTO FORM-1449, WITH 16 CITED REFERENCES, AND COPIES FOR 10 OF THE 16 REFERENCES; PCT/IB/304 (NOTIFICATION CONCERNING SUBMISSION OR TRANSMITTAL OF PRIORITY DOCUMENT); PCT/IB/308 (FIRST NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION); PCT/RO/101 (REQUEST); POSTCARD FOR EARLY NOTIFICATION OF THE SERIAL NUMBER REQUEST. |  |                                 |                     |
| The following fees are submitted:  |  | <u>CALCULATION</u><br>\$ 300.00 | <u>PTO USE ONLY</u> |
| 21. <input checked="" type="checkbox"/> Basic National Fee (37 CFR 1.492(a))..... \$ 300.00  |  |                                 |                     |
| 22. <input checked="" type="checkbox"/> Examination Fee (37 CFR 1.492 (c))<br>If the written opinion prepared by ISA/US or the International Preliminary Examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... \$ 0.00<br>All other situations ..... \$ 200.00   |  | \$ 200.00                       |                     |
| 23. <input checked="" type="checkbox"/> Search Fee (37 CFR 1.492(b))<br>If the written opinion of the ISA/US or the International Preliminary Examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) ..... \$ 0.00<br>Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority ..... \$ 100.00<br>International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB ..... \$ 400.00<br>All other situations ..... \$ 500.00   |  | \$ 400.00                       |                     |
| <b>Total of 21, 22 and 23</b>  |  | <b>\$ 900.00</b>                |                     |
| ___ Additional fee for specification and drawings filed in paper over 100 sheets (excluding Sequence listing or computer program listing filed in an electronic medium).<br>The fee is \$ 250.00 for each additional 50 sheets of paper or fraction thereof.   |  |                                 |                     |
| Total Sheets   | Extra Sheets   | # of each additional 50         | RATE                |
| 25-100 =   | 0/50 =   | 0                               | X \$250             |
| Surcharge of <b>\$130.00</b> for furnishing the oath or declaration later than ___ 20 ___ 30 months from the earliest claimed priority date (37 CFR 1.492(e)).   |  |                                 |                     |
| CLAIMS   | # FILED  | # EXTRA                         | RATE                |
| TOTAL  | 25-20=   | 5                               | X \$50              |
| INDEPENDENT  | 1-3=   | 0                               | X \$200             |
| Multiple dependent claims (if applicable)  |  | + \$360                         |                     |
| <b>TOTAL OF ABOVE CALCULATIONS =</b>   |  | <b>\$ 1,150.00</b>              |                     |
| <input checked="" type="checkbox"/> Applicant claims small entity status.<br>Fees above are reduced by 1/2.  |  |                                 |                     |
| <b>SUBTOTAL =</b>  |  | <b>\$ 1,150.00</b>              |                     |
| Processing fee of <b>\$130.00</b> for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).   |  |                                 |                     |
| <b>TOTAL NATIONAL FEE =</b>  |  | <b>\$ 1,150.00</b>              |                     |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). <b>\$40.00 per property +</b>  |  | <b>\$ 40.00</b>                 |                     |
| <b>TOTAL FEES ENCLOSED =</b>   |  | <b>\$ 1,190.00</b>              |                     |
|  |  | Amount to be: refunded          | \$                  |
|  |  | Amount to be: charged           | \$                  |

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|---|--|-----------------------------|
| U.S. Application No.:<br>Not Yet Assigned | International Application:<br><b>PCT/FI2005/000074</b> | Attorney Docket No.: 27465U |
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a. ☒ Two checks in the amounts of **\$1,150.00** and **\$ 40.00** to cover the above fees are enclosed.

b. ☐ Please charge my Deposit Account Number: 14-0112 in the amount of \$ \_\_\_\_\_ to cover the above fees. (A duplicate copy of this sheet is enclosed.)

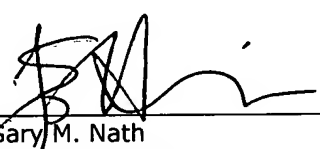
c. ☒ The Commissioner is hereby authorized to charge any additional fees, which may be required, or credit any overpayment to Deposit Account Number: 14-0112.

d. ☐ Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit Card Information should not be included on this form. Provide credit card information and authorization on PTO-2038

**NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed to request that the application be restored to pending status.**

Send All Correspondence To:

Gary M. Nath  
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By: 

Gary M. Nath  
 Reg. No. 26,965  
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 Reg. No. 52,993  
 Customer No. 20529

10/588216

MAIL STOP - PCT

Attorney Docket No.: 27465U

Date: Aug 2, 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

AP20 Rec'd PCT/PTO 02 AUG 2006

In re Application of:

KARVINEN, et al.

Application No.: Not Yet Assigned

Filed: Aug. 2, 2006

Intl. Application No.: PCT/FI2005/000074

Intl. Filing Date: February 4, 2005

Title: **TITANIUM OXIDE PRODUCT METHOD FOR MAKING THE SAME AND ITS USE AS A PHOTOCATALYST**

TRANSMITTAL LETTER

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

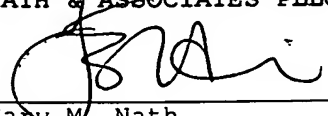
Sir:

Submitted herewith for filing in the U.S. Patent and Trademark Office is the following:

- 1) Transmittal Letter to U.S. Designated/Elected Office (DO/EO/US) Concerning Filing under 35 U.S.C. 371;
- 2) International Publication Number: WO 2005/075354 A2; International Publication Date: August 18, 2005; which consists of 23 pages:
  - 1 page for the Cover Sheet, with the Abstract,
  - 17 pages of Textual Specification,
  - 3 pages of 22 Claims, and
  - 2 sheets of Drawings;
- 3) Preliminary Amendment, which consists of:
  - Attachment A, to be EXAMINED;
- 4) Executed Declaration and Power of Attorney;
- 5) Executed Assignment, with Recordation Cover Sheet;
- 6) PCT/IPEA/416 (Notification of Transmittal of the International Preliminary Report on Patentability);
- 7) PCT/IPEA/409 (International Preliminary Report on Patentability);
- 8) PCT/ISA/237 (Written Opinion of the International Searching Authority);
- 9) PCT/ISA/210 (International Search Report);
- 10) Search Report from corresponding Finnish Application No.: 20040186;
- 11) Information Disclosure Statement;
- 12) PTO Form-1449, with 16 cited references, and copies for 10 of the 16 references;
- 13) PCT/IB/304 (Notification Concerning Submission or Transmittal of Priority Document);
- 14) PCT/IB/308 (First Notice Informing the Applicant of the Communication of the International Application);
- 15) PCT/RO/101 (Request);
- 16) Check No.: 2556 in the Amount of \$1,150.00 for the Basic Filing Fee, which includes the Search and Examination Fees, and for 5 Claims over 20 (\$250), as a **Small Entity**;
- 17) Check No.: 2557 in the Amount of \$40.00 for the Recordation of the Assignment Fee;
- 18) Postcard for Early Notification of the Serial Number Request.

Respectfully submitted,  
NATH & ASSOCIATES PLLC

By:

  
Gary M. Nath  
Reg. No. 26,965  
Tanya E. Harkins  
Reg. No. 52,993  
Customer No. 20529